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Tests are reported with medinal (I), morphine (II), hexenal (III), pantopon (IV), $MgSO_4$ (V), cocaine (VI), procaine (VII), dicaine (VIII), and sovcaine (IX), single and in blends or sequence pairs. Concentrations are in parts per million. When equal volumes of II (6,250) and III (5,000) are mixed, a white precipitate forms in 3-5 minutes in Ringer solution, or 6-10 minutes in distilled water. This compound is so toxic that the blend of solutions at 1/12 the toxic concentration of II and III is toxic. Similar synergistic action is observed with I and II. Clinical use of III in combination with barbiturates is contraindicated. A blend of IV (2,000) and III (5,000) forms a white precipitate, but without synergistic intensification of toxicity. Given after III, VIII and IX show antagonism instead of synergism; and there are other instances of antagonism in blends, or pairs given in sequence. Compounds formed by synergistic pairs have not been identified. Effects of the drugs on rhythm, amplitude, and tonus are given. When IX (0.5) was given after II (125), toxicity was decreased as compared with IX alone; when II followed IX, effect on rhythm was lessened but toxicity to amplitudes and tonus was intensified. The barbiturates, in the blends, decrease bradycardia and act as local anesthetics, showing direct antagonism.

"Blood Proteins and Their Dynamics in Suppurative Processes," Ts. E. Kolodeznaya, Saratov Med Inst

"Klin Med" Vol 23, No 6, 1945, pp 49-50

Total proteins and their composition were determined in the blood of a number of cases of patients with suppurative infections. Total protein level was usually within normal fluctuations. However, there was a pronounced and steady rise of the globulin proportion and drop of albumin fraction. In the course of involution of the process, this tendency was reversed. This is explainable by the fact that antibodies formed in the reticulo-endothelial cells are modified molecules of the blood globulin.

"Comparative Influence and Therapeutic Range of Action of Some Drugs on Isolated Hearts of Cold-Blooded Animals," S. P. Zakrivdoroga, Saratov Med Inst

"Farmakol i Toksikol" Vol 8, No 5, 1945, pp 10-14

Ratios of toxic dose to minimum effective dose and the coefficients of toxic dosage (reference $CHCl_3$ at concentration of 1000 ppm) were measured for 27 drugs by the effect on rate, amplitude, and tonus of frog heart. The drugs include the following in order of their concentration in parts per million: pontocaine, sovcaine, lobeline-HCl, ouabain, hexetone, cocaine-HCl, strychnine- HNO_3 , camphor, adrenaline-HCl, procaine, pantopon, scopalamine-HBr, atropine- H_2SO_4 , ephedrine.

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herenal, nicotine base, Na phenobarbital, morphine-HCl, MgSO₄, picrotoxin, Na barbital, StgO, caffeine, metrazole, and StOF. Highest TD/MD ratios were shown by atropine-H₂SO₄ 5,000, scopolamine-HBr 6,000, and strychnine-HCl 2,000. Coefficients of toxic dosage increased in the order of drugs ranging from 0.0125 for pontocaine to 66.6 for StOF.

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